

## REMARKS

### **I. Status of the Claims**

Claims 1-36 were originally filed and claims 37-51 were later added. Claims 5-15, 26, 27, 33, and 37-51 were under examination. Upon entry of the present amendment, the word "approximately" is deleted from claims 6 and 7. New claims 52-64 are added. These new claims are fully supported by the specification, including the claims as originally filed. For instance, new claims 52 and 62-64 find support in the parent application, USSN 09/501,548, on page 3, line 23, to page 4, line 24. New claims 53-61 find support in the original claims as well as in the currently pending claims 5-7 and 37-45. Thus, no new matter is introduced by the present amendment.

### **II. Claim Objection**

Claims 46-48 were objected to for their dependency from rejected claims. Since all claim rejections are properly addressed in the sections below, Applicants submit that this objection is moot.

### **III. Claim Rejections**

#### **A. 35 U.S.C. §112, Second Paragraph**

The Examiner also rejected claims 5-7, 33, 41-45, and 49-51 under 35 U.S.C. §112, second paragraph, alleging indefiniteness for failure to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse the rejection in light of the present amendment.

More specifically, the Examiner alleged that claims 5-7, 10-15, and 37-41 are indefinite for reciting the phrases "directly available," "indirectly available." To address this issue, Applicant respectfully call the Examiner's attention to the paragraph bridging pages 4 and 5 of the specification. In this paragraph, it is stated that,

The product comprises a substrate (food, medicament, non-harmful inert support, and the like) and an effective amount of an amino acid (either *the amino acid form, the direct form of the amino acid, or the amino acid derived from alternative*

*suitable sources such as peptides, polypeptides, proteins, and derivatives thereof such as amino acid acyl (like acetyl tyrosine or acetyl phenylalanine) or amide derivatives, the indirect form of the amino acid* selected from a group consisting of tyrosine and phenylalanine. The tyrosine and phenylalanine amino acids may be provided directly or in *an indirect form such as in peptides, polypeptides, proteins, and acyl or amide derivatives* that can be hydrolyzed (digested by the animal or by other appropriate means) into the suitable free amino acids, although the direct form is preferred. (Emphasis added)

This passage clearly indicates that tyrosine in the form of a free amino acid is considered "directly available," whereas tyrosine as a part of a peptide/polypeptide/protein or in the form of a tyrosine derivative is considered "indirectly available." Also, this passage indicates that the effective or "available" amount of tyrosine in the claimed food composition includes both the "directly available" and "indirectly available" forms. Furthermore, this is fully consistent with the description elsewhere in the specification that the Examiner has noted, *i.e.*, that on page 3, lines 1-2 ("neither phenylalanine or tyrosine in pure, or free amino acid form, has been known to be an additive in commercial diets"), and on page 11, lines 23-26 ("inclusion of free or available tyrosine (either the amino acid form or the amino acid derivative, usually upon digestion or hydrolysis, from alternative sources such as peptides, polypeptides, proteins, and acyl and amide derivatives thereof)..."). Thus, there is no ambiguity associated with the terms "directly available" and "indirectly available."

The Examiner also alleged that the phrase "at least approximately" recited in claims 6 and 7 renders these claims indefinite. Upon entry of the present amendment, the word "approximately" has been deleted in these claims. This rejection is thus obviated.

In addition, the Examiner alleged that claims 33, 41-45, and 49-51 are indefinite due to the recitation of the phrase "bioavailable." The Examiner apparently believed that the indefiniteness results from the alleged self-contradictory description on pages 12-13 of the specification. In particular, the Examiner questioned whether "bioavailable" tyrosine is defined to be the tyrosine used solely for hair melanin production in an animal following the digestion and absorption by the animal. Applicants respectfully disagree with the Examiner's

interpretation of pages 12-13 of the specification. The paragraph bridging pages 12 and 13 states,

Bioavailability may be defined as the degree to which an ingested nutrient in a particular source is absorbed in a form that can be utilized in metabolism by an animal. This means that bioutilization of the nutrient within normal metabolic processes of an animal establishes bioavailability. ***It is to be understood that not all of the bioavailable tyrosine and/or bioavailable phenylalanine which is ingested and absorbed in a form that can be utilized by an animal to allow expression of, or to provide for, the genetic potential of the animal for hair melanin synthesis in the animal, such as by maximizing the hair melanin synthesis.*** Thus, an animal may only use a portion of the bioavailable tyrosine and/or bioavailable phenylalanine for actually allowing expression of, or for providing, the genetic potential of the animal for hair melanin synthesis by maximizing hair melanin synthesis. Excess bioavailable phenylalanine and/or bioavailable tyrosine would simply be oxidized and used by an animal for energy. (Emphasis added)

It is therefore clear that "bioavailability" is defined as the portion of a nutrient that can be digested, absorbed, and utilized in an animal's metabolism, regardless of the use. Nowhere on page 12 or 13, or even in the entire specification, could a statement be found that defines bioavailable tyrosine or phenylalanine to be used solely for the purpose of promoting hair melanin production. There is no inconsistency in the specification regarding this concept.

Applicants respectfully request that all rejections under 35 U.S.C. §112, second paragraph, for alleged indefiniteness be properly withdrawn, in light of the claim amendment and the above discussion.

B. 35 U.S.C. §102

Claims 5-15, 26, 27, and 37-41 were rejected under 35 U.S.C. §102(e) for alleged anticipation by Sergeraert *et al.* (U.S. Patent No. 6,641,835, filed November 1, 2000). Applicants respectfully traverse the rejection.

While acknowledging that the present application claims priority to its parent application, USSN 09/501,548, filed February 9, 2000, the Examiner alleged that the pending

claims are supported by the parent application only to the extent that tyrosine is used in pet food composition in an amount no more than 0.2% by weight. Applicants do not agree.

On page 6, line 19, to page 7, line 1, USSN 09/501,548 describes the preferred amount of available tyrosine in the claimed dry animal consumable product as "at levels of about 0.05% by weight of diet matter (air dried) *or greater* and more preferably about 0.1% by weight diet matter (air dried) *or greater*" (emphasis added). There are simply no upper limits of the amount of tyrosine in the claimed animal consumable product that can be found in that application. Thus, the parent application supports the use of tyrosine in dry animal consumable product in any amount greater than 0.05%, not "less than or equal to 0.2% down to 0.05%" as alleged by the Examiner. Moreover, the description on page 7 of USSN 09/501,548, where the Examiner pointed to as the basis of his assertion, relates to the relative amount of phenylalanine, not tyrosine.

Applicants thus contend that the pending claims are adequately supported by the parent application and are entitled to the parent filing date of February 9, 2000, as their effective filing date. As such, Sergeraert *et al.*, filed November 1, 2000, cannot anticipate the pending claims. The withdrawal of the anticipation rejection is therefore respectfully requested.

Appl. No. 09/776,216  
Amdt. dated March 1, 2005  
Reply to Office Action of December 15, 2004

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**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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